- Channel 4 permanently closed part of the public road that led to the cabin after the tower blew over.
- After Channel 4 closed the road that led to our cabin, we could only gain 13. access to the cabin by using a key to go through the Channel 4 gate by Cedar Lake Road
- Friends and relatives occupy this cabin about 25 occasions a year, some being 14. weekends.
- Several weeks ago, a Mr. Jim MacDermitt, from Lake Cedar Group, called to 15. ask if I would sell this cabin to his group.
- When I told Mr. MacDermitt that I did not want to sell, he told me that they 16. would have the property condemned and acquire it that way.
- I have no intention of selling this cabin to Lake Cedar Group. 17.
- 18. This cabin is located near the Channel 4 tower.
- 19. The last time the Channel 4 tower was painted, paint fell on my cabin.
- Broken lights bulbs from the Channel 4 tower have also fallen on my cabin. 20.

FURTHER THE AFFIANT SAYETH NOT. This 24 day of May, 1999.

SUBSCRIBED AND SWORN to before me this 24 day of 71999.

My commission expires:

### Appendix J

### Rocky Mountain News article, 12/15/93 Channel 20 Sold for \$7.5 million as station pulls out of Chapter 11

# Channel 20 sold for \$7.5 million as station pulls out of Chapter 11

By Dusty Saunders

News Broadcasting Critic.

KTVD-Channel 20, emerging from Chapter 11 bankruptcy, has been sold to Chicago-based investors for \$7.5 million.

Under the sales agreement, subject to approval by the Federal Communications Commission, Newsweb Co. will pay the remaining \$7.5 million still owed creditors by Channel 20 resulting from its Chapter 11 filing in 1990.

Newsweb, which operates a similar independent UFH station in Chicago, will then assume all existing assets of Channel 20, including studio facilities at 11203 E. Peakview Ave. in Englewood, current programming and future programming obligations.

Richard Miller of New York, president of Twenver Inc., owners of Channel, 20, expects the final, court settlement and sales agree-

ment to be completed within 30 days. Most creditors will get 25¢ on the dollar under the Chapter 11 agreement, Miller said.

Following the settlements, Newsweb will apply for a transfer of license with the FCC.

Miller said the new ownership will be tied into the upcoming, nationwide Paramount Network, which will provide the station a larger programming base.

In announcing the sale, Miller noted that "Channel 20 has come a long way" after filing for protection under Chapter 11.

"Our advertising sales are up 23% over last year, and our cash flow has improved greatly," Miller said. "This brighter financial picture allowed Channel 20 to become an attractive television outlet to buy."

The independent station signed.

Representing Newsweb in sales negotiations in Denver Tuesday was Al Devaney, general manager of the buyer's WPWR-Channel 50 in Chicago.

Like Channel 20, WPWR does not have a network affiliation. The Chicago station competes for audiences with other UHF outlets and WGN, the Tribune-owned station, seen on cable around the country. Tribune Broadcasting also operates KWGN-Channel 2 in Denver.

"Some of our programming on WPWR is very similar to what Channel 20 offers," Devaney said. Devaney added there will be no

Devaney added there will be no immediate personnel or programming changes pending settlement of the Chapter 11 proceedings and the FCC license change approval.

"As we go along, we'll upgrade the Channel 20 schedule," Devaney said, noting that WRWR is "yery by "in children's around in-

## Appendix K

## Denver Post article 12/16/93 Chicago Broadcaster bails out Channel 20

■ CHANNEL 20 BOUGHT — Channel 20 in Denver, which filed for Chapter 11 in July 1990, has been purchased for \$7.5 million by Newsweb of Chicago, owner of independent station WPWR-TV in Chicago.

As part of the transaction, Newsweb sold the construction permit for Channel 14 in Boulder to Roberts Broadcasting Co. of Denver.

Roberts plans to build the Denver-Boulder affiliate of the Home Shopping Network. Pending approval by the Federal Communications Commission, Roberts would become the state's first black-owned TV broadcasting entity.

> ins has decorated 41 years DEC 16,1993 DENVER POST

hannel 20 has emerged from bank ruptcy. The independent station, specializing in off-network reruns, is finally back in the game in a related deal, a Home Shopping Net work affiliate has been proposed for this narket, possibly to be located in Denver's live Points area.

Denver's KTVD Channel 20, which filed for Chapter 11 in July 1990, was purchas d Monday by Newsweb of Chicago, owner of independent station WPWR-TV in Chi-

cago, for \$7.5 million.

As part of the transaction, the construcion permit for Channel 14 in Boulder was old by Newsweb to Roberts Broadcasting Co. of Denver, Roberts intends to build the Denver-Boulder affiliate of the Home shopping Network. (HSN; owned by Telecommunications Inc.-Liberty Media, is now in some 70 million households nationally). Pending FCC approval, Roberts would become Colorado's first African American-owned TV broadcasting entity. We may be in a position to build the station in the Five Points area," principal



Michael Roberts said this week, adding that his company has had discussions with Mayor Wellington Webb. "We will be aggressively pursuing the appropriate engineering to put the station on the air." For starters, he'll identify a tower site.

Meanwhile, also pending FCC approval, Channel 20 T.V. Company, an affiliate of Newsweb, will become owner of KTVD.

"It's been a rough 31/2 years," said Dick Miller, KTVD president and general manager. With the sale, "we emerge from the stigma of bankruptcy.'

Fred Eychaner, president and CEO of Newsweb, assumes all the current liabilities of Channel 20 as well as all programming contracts. (Among the syndicated series coming to Channel 20 next fall is "Beverly Hills, 90210.")

KTVD was "self-financed" through the bankruptcy, Miller said. However, the station's sales rose 24 percent this year, he said, due to hard work and a change in perception regarding the station."

Roberts said the new Home Shopping Network affiliate, proposed as a 5 millionwatt UHF station, would air five minutes per hour of community news and public service announcements. The segments, called "In Your Interest," would look at community "good news." He says the idea has been well received in St. Louis.

While HSN might be a boost to Five Points in terms of community redevelopment and jobs, its main goal in life is to sell, sell, sell. Real, honest-to-gosh cubic zircon! Would five minutes per hour of altruistic community programming offset the 55 minutes per hour of video hard-sell?

It will be a few months before the idea takes shape. Until then, zircos customers will have to settle for cable

## Appendix L

Waiver of Section 73.1125

which hope 19

FOO MAIL SECTION

OCT 2 3 1995

Ост 74 7 зэ АМ "95

DISPARANTA TO BY

1800E1-SA

Council for Public Television, Channel 6, Inc. c/o James N. Morgese 1089 Bannock Street Denver, CO 80204

Re: BPET-950112KG

Grand Junction, CO

Ch-18

Dear Mr. Morgese:

This is in reference to the above-captioned application for a new noncommercial educational television station to operate on Channel 18, Grand Junction, Colorado.

You propose to operate your station as a "satellite repeater" of noncommercial educational television station KRMA(TV), Denver, Colorado, without a main studio within the station's principal community contour. Section 73.1125 of the Commission's Rules states that each broadcast station shall maintain a main studio within the station's principal community contour. You are, therefore, requesting a waiver of this Rule.

You state that operation in this manner would be in the public interest because the satellite station would fulfill Channel 6's mission to provide service to as wide an audience as possible in a manner consistent with the realities of the present public broadcasting funding situation. In that regard, Channel 6 plans to apply for a PTFP grant for matching federal funds for the project. Channel 6 firmly believes that it would be unable to offer the highest quality educational programming if it were required to operate the station as a separate entity. Channel 6 will, you state, effectively determine local needs through its Grand Junction board members, its Community Advisory Board, its Grand Junction local advisory group, as well as contacts with local community leaders and other ascertainment mechanisms. Also, it will attempt to cover significant events in the Grand Junction area, including cultural events, political campaigns and election results.

Moreover, you state that the Grand Junction station will be capable of limited program origination and that you plan for the station to have the capability to originate programming for the Grand Junction area or to be relayed back to the KRMA studio for

distribution over both stations. Further, you acknowledge the Commission's requirement for a toll-free telephone number and a local public inspection file. Finally, you point out that two of the four commercial television stations in the Grand Junction-Durango area operate as satellite stations.

The Commission has traditionally allowed noncommercial educational broadcast systems to operate in the manner proposed. In the past, the Commission has recognized the benefits of centralized operations for noncommercial educational stations, given the limited funding available to these stations, and we have granted waivers to state and regional public television and radio networks to operate "satellite" stations that do not meet the requirements of a main studio. These stations, however, have not been permitted to ignore local service obligations, and waivers generally have been granted only upon a showing that the local community would be served.

You have shown that a grant of the waiver of Section 73.1125 would serve the public interest by allowing public television to provide programming in accordance with the local needs. You will be able to determine the local needs by your board members, Community Advisory Board, local advisory group and community leaders. As required by the Commission, the station must establish a toll-free telephone number that will permit residents of Grand Junction to be in contact with the studios in Denver at no charge; and must establish the public inspection file at a convenient location in Grand Junction.

Accordingly, IT IS ORDERED, that the request of Council for Public TV, Channel 6, Inc. for a waiver of Section 73.1125 of the Commission's Rules IS GRANTED.

Clay C. Pendarvis Chief, Television Branch Video Services Division Mass Media Bureau

cc: Margaret L. Miller, Esq.

sva/MMB"granjun"
Typed: 7-17-95

## Appendix M

## Combined Communications Corp Opposition to Petition to Deny

nd Mar 25 17 54-09 1993

#### RECEIVED

## BEFORE THE FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

MAR 29 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In re Application of	)
COMBINED COMMUNICATIONS CORPORATION	) ) File No. BRCT-921201LD )
For Renewal of License of Television Station KUSA-TV Denver, Colorado	) ) )

To: Chief, Mass Media Bureau

#### OPPOSITION TO PETITION TO DENY

Combined Communications Corporation ("CCC"), the licensee of television station KUSA-TV, Denver, Colorado ("KUSA-TV"), by its attorneys, hereby opposes the Petition to Deny ("Petition") filed on March 1, 1993 by Newsweb Corporation ("Newsweb"), the permittee of television station KTVJ-TV, Boulder, Colorado ("KTVJ").

In filing its Petition, Newsweb has disregarded controlling Commission precedent and mischaracterized the facts surrounding its attempts to become a tenant on one of the existing television towers on Lookout Mountain, in Jefferson County, Colorado. As concerns KUSA-TV, Newsweb maintains that the Commission should deny CCC's renewal application because CCC has supposedly "steadfastly refused" to permit KTVJ to locate on KUSA-TV's tower. Petition at 14. Specifically, Newsweb argues that Lookout Mountain,

Continued on following page

Newsweb filed similar petitions against the other Denver TV stations' renewal applications, apparently using identical boilerplate rhetoric in each pleading. As the Petition makes clear, KTVJ has become obstructed by

where KUSA-TV's transmitter is located, is a "unique site"; therefore, Newsweb reasons, by not accepting KTVJ as a tenant, CCC has violated Section 73.635 of the Commission's rules (the "unique site" rule). Further, Newsweb alleges that CCC's application should be denied because CCC and other members of a group of existing Lookout Mountain tower owners (the "Working Group"), which was formed to respond to legal actions of the local zoning board, have not granted Newsweb membership and have refused to permit Newsweb to locate KTVJ's facilities on the tower of any Working Group member.

As briefly demonstrated below, KTVJ's Petition is utterly devoid of merit for many obvious reasons. 2/ First, the Commission has already made it abundantly clear that Section 73.635(c) does not apply to KTVJ's situation in the

Continued from previous page local zoning limitations, and it has unwisely decided to invoke FCC procedures to address what are really zoning concerns.

<sup>2/</sup> As a threshold matter, Newsweb lacks legal standing to challenge CCC's renewal application. Newsweb maintains that KUSA-TV's refusal to make its Lookout Mountain site available to KTVJ results in direct injury to KTVJ in violation of Section 73.635 of the Commission's rules. However, KTVJ is not a party in interest under Section 309(d) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(d). To establish standing as a party in interest, a petitioner must demonstrate a causal link "between the claimed injury and the challenged action." See Lawrence M. Brandt, 3 FCC Rcd. 4082, 4082 (Mob. Serv. Div. 1988). Under this applicable standard, Newsweb does not have standing to file its Petition because its alleged injury cannot be plausibly traced to the renewal of KUSA-TV's license. As demonstrated herein, Section 73.635 does not apply to the Denver market and in any event KUSA-TV's tower is completely unsuitable for KTVJ's purposes. Therefore, Newsweb's purported claim of injury is unrelated and without relevance to the instant proceeding.

Denver market. Second, even assuming, arguendo, that the unique site rule could apply in this instance, KTVJ representatives, in meetings with KUSA-TV principals, have manifested a lack of interest in locating on KUSA-TV's existing tower because of its limited height and the resulting unsuitability of KTVJ's signal coverage to Boulder. Finally, the Working Group was formed to address county land-use matters affecting current users of Lookout Mountain antenna sites, and has no bearing on KTVJ's tower site plans.

#### I. Section 73.635 of the Commission's Rules Does Not Apply to the Denver Market

The Petition acknowledges that the Commission has already expressly held that Section 73.635 of its rules does not apply to KTVJ's situation in the Denver market. This fact renders Newsweb's Petition and similar filings against other Denver television stations a clear abuse of FCC processes, which should be dealt with summarily.

Newsweb urges that CCC has denied KTVJ access to the KUSA-TV tower site in violation of the Commission's unique site rule, 47 C.F.R. § 73.635, which bars a licensee from excluding competing television broadcasters from its site "where the exclusive use of such site by the . . . licensee would unduly limit the number of television stations that can be authorized in a particular area or would unduly restrict competition among television stations." However, the Commission's Mass Media Bureau has already addressed a similar allegation by Newsweb against another Denver

television licensee, and has ruled that the Denver market is served by a substantial number of television broadcasters, and that therefore the unique site rule does not apply in the Denver market. <u>D&D Broadcasting, Inc.</u>, FCC 92-526, ¶ 9 (released November 25, 1992). Accordingly, on this basis alone Newsweb's Petition should be denied and CCC's application should be granted without further delay.

## II. KTVJ's Representatives Have Acknowledged that KUSA-TV's Tower is Not Suitable for KTVJ

Even assuming, arguendo, that Section 73.635 could be deemed to apply in this instance, Newsweb's objection is still without merit, because representatives of KTVJ have advised CCC principals that the KUSA-TV tower height is unsuitable for KTVJ. As explained in the attached statement of Myron Oliner, Chief Engineer of KUSA-TV (Exhibit A), in 1989 meetings with KUSA-TV, representatives of KTVJ advised that the permittee would require a minimum height of 500 feet at the KUSA-TV site for its signal to serve Boulder in accordance with minimum FCC requirements. Exhibit A at 2. According to Mr. Oliner, representatives of KTVJ made clear during these discussions that KTVJ "would have no interest at all in locating KTVJ's antenna on KUSA-TV's existing 200 ft. tower." Id. Other than a pro forma letter sent as an obvious predicate for the Petition, Newsweb has not approached CCC regarding locating the KTVJ antenna on KUSA-TV's tower since the meetings in 1989.

Moreover, as the result of structural studies completed in 1990, CCC has become aware that, except for an

expected HDTV antenna that may be required for KUSA-TV, the KUSA-TV tower has no tolerance for further loading, and hence could not provide a suitable antenna location for KTVJ. <u>Id</u>. at 4-5. This is a further reason why Newsweb's petition must be dismissed and CCC's application should be granted.

#### III. CCC Has Not Colluded with Other Television Licensees to Deny KTVJ Access to Lookout Mountain

Newsweb suggests that CCC has colluded with other Denver television licensees to deny KTVJ access to Lookout Mountain. Specifically, KTVJ's Petition references CCC's participation in the Working Group before the Jefferson County Board of Commissioners as purported evidence that CCC has violated the unique site rule.

Contrary to the impression Newsweb seeks to convey, the Working Group, which includes KUSA-TV and five other local television stations, was formed to explore alternatives to a County Board proposal to amortize and remove all existing, non-conforming towers on Lookout Mountain. The amortization proposal was only one part of an ongoing effort by Jefferson County to reduce the number of broadcasting towers on Lookout Mountain, to prevent the proliferation of new broadcasting towers on Lookout Mountain, and to minimize the adverse impacts of broadcasting towers on Lookout Mountain.

Each of the members of the Working Group owns a television tower on Lookout Mountain. The Working Group's membership has been limited to television tower owners to

ensure and maintain a unity of interest in protecting these substantial assets. The Group was formed with the County Board's encouragement, specifically to respond to the County's amortization and removal proposals. The Group does not make decisions concerning whether to lease space to new tenants on existing towers or to relocate current tenants from existing towers.

Many groups have presented their views to the County Board concerning the amortization proposal and the County's plans for broadcast towers on Lookout Mountain. No individual or entity, including KTVJ, has been excluded from appearing before the County Board. Moreover, the Working Group has consistently recognized the need to accommodate new broadcast facilities on Lookout Mountain in its proposals to the County Board. While the Working Group has submitted various proposals in the County Board, the County Board has also received proposals from a wide variety of participants before it, including KTVJ. Any decision regarding tower amortization, tower consolidation and allocations for future users on Lookout Mountain is exclusively that of the County Board, not of the Working Group.

#### Conclusion

For the foregoing reasons, Newsweb's Petition does not make a <u>prima facie</u> case that grant of KUSA-TV's renewal application is inconsistent with the public interest.

Accordingly, CCC respectfully submits that Newsweb's Petition must be denied and CCC's application should be granted.

Respectfully submitted,

COMBINED COMMUNICATIONS CORPORATION

Bv:

Peter D. O'Connell Kathleen A. Kirby

REED SMITH SHAW & McCLAY 1200 18th Street, N.W. Washington, D.C. 20036 (202) 457-6100

Its Attorneys

March 29, 1993

#### EXHIBIT A

#### STATEMENT OF MYRON OLINER

- l. My name is Myron Oliner. I am the Chief Engineer of television station KUSA-TV, Denver, Colorado ("KUSA-TV"), which is licensed to Combined Communications Corporation ("CCC"), a subsidiary of Gannett Co., Inc. ("Gannett"). I am providing this statement in support of CCC's Opposition to the Petition to Deny KUSA-TV's license renewal application filed by Newsweb Corporation, the permittee of television station KTVJ, Channel 14, Boulder, Colorado ("KTVJ").
- 2. On several occasions during 1988 and 1989, Mr. Dirk Freeman, Vice President of Mountain Contours, contacted me on behalf of station KTVJ. He said Mountain Contours wanted to erect an antenna tower for KTVJ on Lookout Mountain (where KUSA-TV's tower is located) and was looking for other station tenants. Since KUSA-TV was then exploring a possible replacement of its antenna, we agreed to have several discussions to see if there were possibilities of working together on this project. Herb Schubarth, Vice President of Gannett, also participated in most of the discussions.
- 3. Meetings with Mr. Freeman were held in Denver when Mr. Schubarth was in town. We discussed the possibilities of KUSA-TV moving onto a new tower that would be built by Mountain Contours, or the prospects of having Mountain Contours move to the existing KUSA-TV tower.

- 4. On April 2, 1989, I flew to Washington, DC and on April 3rd met with Mr. Freeman, Mr. Schubarth and Mountain Contours' engineering consultant, Richard Bibey, in Bibey's office. Also present was Noel Luddy from Dielectric Communications. Among other topics, we discussed the effects of increasing the KUSA-TV antenna height to 850 ft. by KUSA-TV moving onto a Mountain Contours tower or by having KUSA-TV build a new 500 ft. tower. (The current KUSA-TV tower is only 200 ft. above ground, and it is the shortest of all of the Denver station TV towers.)
- Mr. Freeman advised us during the meeting that KTVJ required a minimum height of 500 feet to put a signal into Soulder that would enable them to comply with FCC coverage requirements. He and Mr. Bibey made clear to me in this discussion that KTVJ would have no interest at all in locating KTVJ's antenna on KUSA-TV's existing 200 ft. tower. Since the 200 ft. height of the existing KUSA-TV tower is obviously far less than the 500 ft. that Mountain Contours said it needed, we evaluated possible future relationships on the assumption that KUSA-TV might build a new tower. The strength of the existing KUSA-TV tower was unknown at the time. We assumed that if a new tower had to be constructed, it would have to have available capacity for other users in order to satisfy the strict Jefferson County zoning requirements. We discussed a tower with a base that would straddle the existing transmitter building since space was at a premium for a new tower. There would also have to be a major building facility change to accommodate the additional

- users. The existing property is small, a triangle shape approximately 240 ft. on two legs and 150 ft. on the third leg.
- 6. No one at the 1989 meeting could predict with certainty how the tower height would affect the received signal level at the Table Mountain Radio Receiving Zone. (FCC Rules require protection of the Receiving Zone from harmful interference in the vicinity of Boulder County, Colorado.) Mr. Bibey said there was a 50-50 chance that the KUSA-TV signal from a 500 ft. tower would exceed the Boulder Receiving Zone restrictions. There were no ideas expressed as to how to correct the situation if the Receiving Zone was adversely affected. We did confirm that according to a previous KUSA-TV study a 400 ft. tower height for KUSA-TV would un-shadow approximately .7 sq. mile in Boulder and 3 sq. miles south of Green Mountain. (This improvement would have very little practical benefit to KUSA-TV.) We also discussed the possibility of encountering reflections from the mountains because of increased antenna height.
- 7. There are several practical reasons why CCC would not choose to abandon the existing KUSA-TV site and move to a new KTVJ tower. Currently, near the KUSA-TV antenna tower there is a 150 ft. tower which supports a weather radar and an ENG microwave-receive antenna. This tower provides KUSA-TV a back-up site for use in emergencies if the KUSA-TV signal cannot be broadcast from its main antenna tower. To put everything on one guyed tower would mean total station outage if the main tower were to be damaged. (There were no discussions with Mountain Contours about provisions for similar backup antenna operation on

a KTVJ common tower.) Moreover, there would be major logistical problems and costs in moving the KUSA-TV transmitter and antenna to a new site without being unduly vulnerable to off-air time. The way to avoid this risk would be to install a new KUSA-TV transmitter, which would involve considerable cost. In any event, there are few benefits to KUSA-TV associated with moving to a taller tower, and there is uncertainty about getting eventual zoning approval for such a project.

- Following our meeting in April, 1989, until January 8. 1993, to my knowledge neither Mr. Freeman nor anyone else representing KTVJ has contacted KUSA-TV with a request for CCC to consider locating the KTVJ antenna on KUSA-TV's current tower. In January 1993, I saw a copy of a letter from Newsweb Corporation addressed to Mr. Joe Franzgrote, President of KUSA-TV. In the letter Newsweb requested a meeting to discuss what had already been discussed in 1989. I reminded Mr. Franzgrote of my 1989 discussions with Mountain Contours. Ι did not hear any more about a scheduled meeting. It is my belief, based upon the face-to-face discussions described above, that KTVJ has no genuine interest in using KUSA-TV's tower, in view of its limited height and the unsuitability of KTVJ's coverage to Boulder if the station occupied a 200 ft. tower on Lookout Mountain.
- 9. It may be noted that in 1990 KUSA-TV acquired a new antenna and had structural studies of its tower conducted in connection therewith. In those studies CCC has been advised that the KUSA-TV tower (which is free-standing) has no tolerance for

further loading beyond its own future anticipated HDTV needs, and that it would have to be totally reconstructed to accommodate another TV station. In other words, as now configured this existing tower could not possibly provide a potential antenna location for KTVJ.

Denver TV stations' Working Group dealing with Jefferson County's treatment of antenna towers on Lookout Mountain. I affirm that I have read the recital of facts in the CCC Opposition concerning the role and purposes of the Working Group, and that the Opposition is accurate.

I declare under penalties of perjury that the information stated herein is true and correct.

Signed this 35 A day of March, 1993.

Myron Oliner

#### CERTIFICATE OF SERVICE

I, Melanie G. Noel, do hereby certify that a copy of the foregoing "Opposition to Petition to Deny" was mailed by first class mail, postage prepaid, this 29th day of March, 1993, to the following:

Edward Hummers, Esq. Kathleen Victory, Esq. Fletcher Heald & Hildreth 1300 North 17th Street 11th Floor Arlington, VA 22209

Counsel for Newsweb Corporation

Melanie G. Noel

## Appendix N

**Jefferson County BCC CC83-1089** 

STAFF EXHIBIT X"

Commissioner Stanbro adopted:

moved that the following Resolution be

BEFORE THE BOARD OF COUNTY COMMISSIONERS

OF THE COUNTY OF JEFFERSON

STATE OF COLORADO

RESOLUTION NO. CC83-1089

Case No. SU83-2

Map No. 107

Applicant:

JOHN BROWNE ESTATE

Location:

Lookout Mountain Section 4, Township 4 South,

Range 70 West

Zone District:

Agricultural-Two (A-2)

Purpose:

Special Use for Radio Transmission Tower

Approximate Area:

30.21 acres

WHEREAS, John Browne Estate did file an application with the Planning Department of Jefferson County on or about April 14, 1983, to obtain a special use permit on the herein-described property in Jefferson County which is located in the Agricultural—Two (A-2) Zone District; and

WHEREAS, a public hearing was held by the Jefferson County Planning Commission on September 28, 1983, at which time the Planning Commission did, by formal resolution, recommend denial of the subject special use application; and

WHEREAS, after notice as provided by law, a public hearing was held by this Board on November 7, 1983, at which time this matter was continued until December 19, 1983, at which time this matter was further continued until December 27, 1983, for decision; and

WHEREAS, based on the evidence, testimony, exhibits, study of the Comprehensive Plan, recommendations of the Jefferson County Planning Commission, comments of the Jefferson County Planning Department, comments of public officials and agencies, and comments from all interested parties, this Board finds as follows:

- That proper posting, publication and public notice was provided as required by law for the hearings before the Planning Commission and the Board of County Commissioners.
- 2. That the hearings before the Planning Commission and the Board of County Commissioners were extensive and complete, that all pertinent facts, matters and issues were submitted and that all interested parties were heard at those hearings.
- That the proposed land use is not compatible with the allowable or existing land uses in the surrounding area due to the significant negative visual impact. The proposed tower would be taller than any existing towers in the area. The tower would be painted in alternate bands of orange and white and have lights spaced every 148 feet according to Federal Aviation Administration requirements which would make the proposed tower quite visible to the neighboring residents.

The area is characterized by a combination of residential, recreational and communication uses. Permitting an additional tower in the Lookout Mountain area with the existing density of communication towers would exacerbate the existing compatibility problems. The proposed location of the tower would expand the area where towers are currently located on Lookout Mountain and would have a significant negative visual impact.

Existing problems of electronic interference for residents in the Lookout Mountain area may increase if this special use were granted.

- That no known commercial mineral deposits exist upon the subject property.
- 5. That for the above-stated reasons, the applied for special use is not in the best interest of the health, safety, morals, convenience, order, prosperity and welfare of the citizens of Jefferson County.

NOW, THEREFORE, BE IT RESOLVED that Special Use Application No. SU83-2, located within the Agricultural-Two (A-2) Zone District for the following described unincorporated area of Jefferson County be and hereby is DENIED:

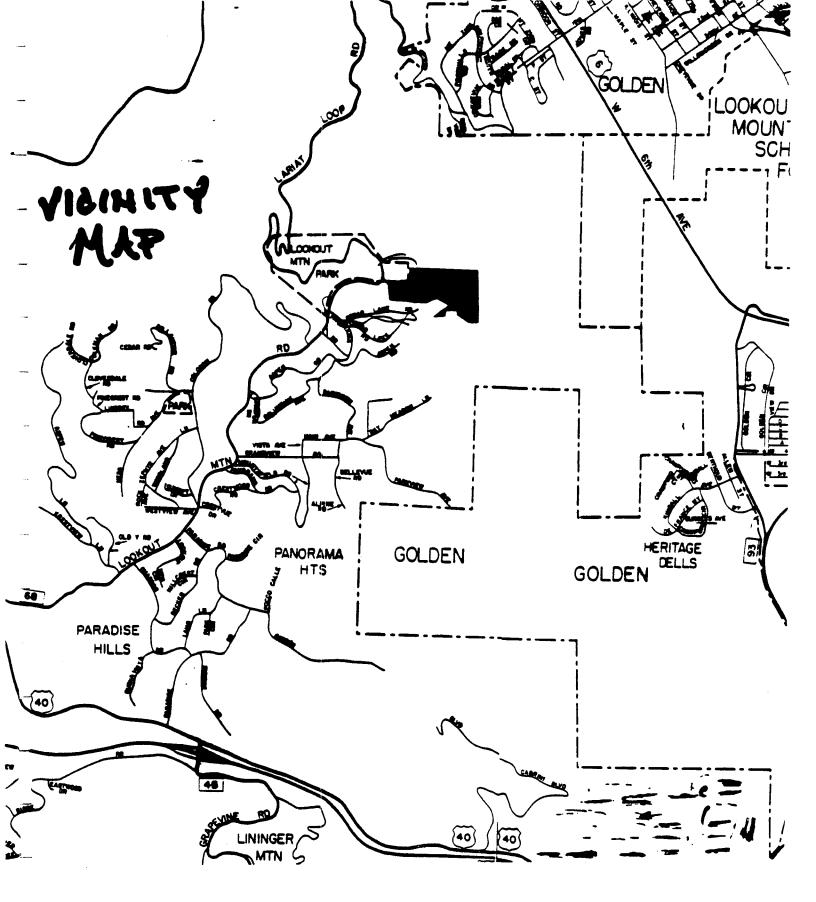
A parcel of land in the Southwest % of Section 4, Township 4 South, Range 70 West of the 6th Principal Meridian, Jefferson County, State of Colorado, described as beginnin at the South & corner of Section 4; thence South 89033'30" West along the South line of said Section 4, 654.13 feet to a corner of a tract described in Book 231 at Page 239 of Jefferson County records; thence continuing along the said tract North 3º21'14" West, 462.66 feet to corner no. 5 and South 74°29'05" West, 235.55 feet to corner no. and South 65014'10" West, 172.05 feet to corner no. 3; thence North 24022'47" West, 831.86 feet to a point on the Southerly boundary line common to Lots 9 and 10, Block 4 LOCKOUT MOUNTAIN PARK SUBDIVISION NO. 6; thence along said boundary line, North 65058'. East, 353.50 feet and North 00°47'24" West, 360.01 feet to a point on the Southerly boundary line of a tract described in Book 789 at Page 108 and the True Point of Beginning; thence along the boundary line of said tract, North 56032'13" East, 422.00 feet; thence North 59007'45" West, 241.00 feet; thence South 77027'15" West, 327.00 feet to a point on the Northerly boundary line and common to Lots 67 and 68 of the said Block 4; thence along the boundary line of Block 4, North 80°56'01" West, 101.60 feet; thence South 82°43'18" West, 201.00 feet; thence North 87°03'16" West, 396.00 feet to a point on the Easterly boundary of a tract described in Book 2228 at Page 9 of Jefferson County records; thence along said boundary line North 5033'15" West, 396.54 feet to a point on the Southerly boundary of a tract described in Book 325 at Page 300; thence along said boundary line North 88052'09" East, 432.13 feet; thence North 00°35'54" East, 270.00 feet to a point on the East-West centerline of Section 4; thence North 88052'09" East along the said centerline, 1,401.21 feet to the center of Section 4; thence South 3º29'00" East along the North-South centerline of Section 4, 1,050.00 feet; thence South 86°31''10" West, 280.00 feet; thence North 51°19'26" West, 207.10 feet; thence North 2019'35" West, 100 feet, thence South 37041'29" West, 250.00 feet; thence South 2º18'14" East, 100.00 feet; thence South 80º19'25" West, 305.46 feet to the True Point of Seginning, excluding therefrom a tract recorded in Book 956 at Page 590 of Jefferson County records containing 0.539 acres described as beginning at the West & corner of said Section 4, thence South 54011'25" East, 1,486.63 feet to the KOA tower: thence North 32018'35" West, 425.00 feet and South 57041'16" West, 50.00 feet to the true point of beginning; thence South 32018 21" East, 235.00 feet; thence South 57041'16" West, 100.00 feet to the true point of beginning, leaving a net acreage of 30.21 acres, more or less, and being subject to the 100 foot Shoshone Transmission

Commissioner Ferdinandsen seconded the adoption of the foregoing Resolution. The roll having been called, the vote was as follows:

Commissioner Donald C. Stanbro - "Aye";
Commissioner Rich Ferdinandsen - "Aye";
Commissioner Marjorie E. Clement, Chairman - "Aye";

The Resolution was adopted by unanimous vote of the Board of County Commissioners of the County of Jefferson, State of Colorado.

DATED: December 27, 1983



Ste is approx 600' east of tall tower on Lookout Mtn.

Commissioner Clement moved that the following Resolution be adopted:

#### BEFORE THE BOARD OF COUNTY COMMISSIONERS

#### OF THE COUNTY OF JEFFERSON

STATE OF COLORADO

#### RESOLUTION NO. CC90-592

Case No. 288-21

Map No. 107

Applicant:

MOUNTAIN CONTOURS CORP.

Location:

Lookout: Mountain

Section 4, Township 4 South,

Range 70 West

From:

Agricultural-Two (A-2) Zone

District

To:

Planned-Development (P-D) Zone

District

Purpose:

Telecommunications tower

Approximate Area:

30.21 acres

WHEREAS, Mountain Contours Corp. did file an application with the Planning Department of Jefferson County on or about May 25, 1988, to rezone the herein described property in Jefferson County from Agricultural-Two (A-2) Zone District to Planned-Development (P-D) Zone District; and

WHEREAS, a public hearing was held by the Jefferson County Planning Commission on August 3, 1988, and continued to August 17, 1988, for decision, at which time the Planning Commission did, by formal resolution, recommend denial of the subject rezoning application; and

WHEREAS, after notice as provided by law, many public hearings were held by this Board and at the hearing held on June 26, 1990, this matter was continued until July 10, 1990, for decision; and

WHEREAS, based on the evidence, testimony, exhibits, study of the Comprehensive Plan, recommendations of the Jefferson County Planning Commission, comments of the Jefferson County Planning Department, comments of public officials and agencies, and Page 2 CC90-592

comments from all interested parties, this Board finds as follows:

- 1. That proper posting, publication and public notice was provided as required by law for the hearings before the Planning Commission and the Board of County Commissioners of Jefferson County.
- 2. That the hearings before the Planning Commission and the Board of County Commissioners were extensive and complete, that all pertinent facts, matters and issues were submitted and that all interested parties were heard at those hearings.
- 3. That the proposal is not in conformance with the visual policies of the Telecommunications Land Use Plan component of the Jefferson County Comprehensive Plan in that the visual impacts from the height of the tower are not offset by the height of existing towers proposed to be removed, and an 860 foot tower will be the second tallest tower on Lookout Mountain and will result in unacceptable visual impacts to residents of Golden and Lookout Mountain and to visitors to Buffalo Bill's Grave.
- 4. That the proposal is not in conformance with the Tower Siting Policies in the Telecommunication Land Use Plan component of the Jefferson County Comprehensive Plan in that the proposed facility is significantly larger than the facilities proposed to be removed by the consolidation plan in the Official Development Plan; specifically, both options in the Official Development Plan allow the applicant to build to a height of 860 feet without a binding commitment to remove existing towers of comparable height.
- 5. That the tower has not been located to prevent interference to law enforcement and other land mobile radio providers on Lookout Mountain. Therefore, the proposal endangers the safety of residents of Jefferson County; it is incompatible with existing telecommunications uses on Lookout Mountain; and it is not in conformance with the Engineering and Economic Policies in the Telecommunication Land Use Plan component of the Jefferson County Comprehensive Plan.
- 6. That for the above stated reasons, the applied for rezoning is not in the best interest of the health, safety, morals, convenience, order, prosperity and welfare of the citizens of Jefferson County.

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NOW, THEREFORE, BE IT RESOLVED that Rezoning Application Case No. 88-21 to amend Jefferson County Zoning Map No. 107 to include within the Planned-Development (P-D) Zone District and to exclude from Agricultural-Two (A-2) Zone District the following described unincorporated area of Jefferson County, be and hereby is DENIED:

A parcel of land in the SW% of Section 4, T. 4 S., R. 70 W. of the 6th P.M., Jefferson County, Colorado, described as beginning at the St corner of Section 4; thence S 89°33'30" W along the south line of the said Section 4, 654.13 ft. to a corner of a tract described in Book 231, Page 239, Jefferson County Records; thence continuing along the said tract, N 03° 21'14" W, 462.66 ft. to Corner No. 5 and S 74° 29' 05" W, 235.55 ft. to Corner No. 4 and S 65° 14' 10" W, 172.05 ft. to Corner No. 3; thence N 24° 22' 47" W, 831.86 ft. to a point on the southerly boundary line common to Lots 9 and 10, Block 4, Lookout Mountain Park Subdivision No. 6: thence along said boundary line, N 65° 58' 15" E, 359.50 ft. and N 00 $^{\circ}$  47'24" W, 360.01 ft. to a point on the southerly ary of a tract described in Book 789, Page 108 and the true point eginning; thence along the boundary line of said tract, N 56° 32'13"E, 422.00 ft.; thence N 59°07'45"W, 241.00 ft.; thence S 77° 27'15" W, 327.00 ft. to a point on the northerly boundary line and common to lots 67 and 68 of the said Block 4; thence along the boundary line of Block 4; N 80° 56'01" W, 101.60 ft.; thence S 82° 43'18" W, 201.00 ft.; thence N 87° 03'16" W, 396.00 ft. to a point on the easterly boundary of a tract described in Book 2228, Page 9, Jefferson County Records: thence along said boundary line, N 050 33 15" W, 396.54 ft. to a point on the southerly boundary of a tract described in Book 325, Page 300; thence along said boundary line, N 88°52'09" E, 432.18 ft.; thence N 00035'54" E, 270.00 ft. to a point on the east-west center line of Section 4; thence N 88°52'09" E along the said centerline,1401.21 ft. to the center of Section 4; thence S 03°29'00" E along the north-south centerline of Section 4, 1050.00 ft.; thence S 86°31'00" W, 280.00 ft.; thence N 51°19'26" W, 207.10 ft.; thence N 02°18'35"W, 100.00 ft.; thence S 87°41'29" W, 250.00 ft.; thence S 02°18'14" E, 100.00 ft.; thence S 80°19'26" W, 305.46 ft. to the true point of beginning, excluding therefrom a tract recorded in Book 956, Page 590 containing 0.539 acres described as beginning at the W1 corner of said Section 4; thence S 54°11'25" E, 1486.63 ft. to the KOA tower; thence N 32°18'35" W, 425.00 ft. and S 57°41'16" W, 50.00 ft. to the true point of beginning; thence N 32°18'28" W, 235.00 ft.; thence N 57°41'27" E, 100.00 ft.; thence S 32°18'21" E, 235.00 ft.; thence S 57°41'16" W, 100.00 ft. to the true point of beginning, leaving a net acreage of 30.21 acres and being subject to the shown 100 ft. Shoshone Transmission Line easement.

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Commissioner Stone seconded the adoption of the foregoing Resolution. The roll having been called, the vote was as follows:

```
Commissioner Marjorie E. Clement - "Aye";
Commissioner John P. Stone - "Aye";
Commissioner Rich Ferdinandsen, Chairman - "Aye":
```

The Resolution was adopted by unanimous vote of the Board of County Commissioners of the County of Jefferson, State of Colorado.

DATED: July 10, 1990

## Appendix O

**Jefferson County BCC CC99-427** 

#### Commissioner Lawrence moved that the following Resolution be adopted:

#### BEFORE THE BOARD OF COUNTY COMMISSIONERS

#### OF THE COUNTY OF JEFFERSON

#### STATE OF COLORADO

#### RESOLUTION NO. CC99-427

Case No.

98015154RZP1

Map No. 107

Applicant:

Lake Cedar Group, LLC

Location:

21079 Cedar Lake Road

Section 4, Township 4 South,

Range 70 West

From:

Mountain Residential-One and

Agricultural-Two Zone Districts

To:

Planned Development Zone District

Purpose:

Installation of Telecommunications

Tower and Support Equipment

Approximate Area:

79.6 Acres

WHEREAS, Lake Cedar Group, LLC did file an application with the Planning Department of Jefferson County to rezone the herein described property in Jefferson County from Mountain Residential-One and Agricultural-Two Zone Districts to Planned Development Zone District to allow for the installation of a new 854 foot tall broadcast tower and support equipment for digital TV, FM broadcasting, analog TV and low power telecommunication devices; and

WHEREAS, a public hearing was held by the Jefferson County Planning Commission on December 2, 1998, which hearing was continued to January 6, January 13, and July 13, 1999, at which time the Planning Commission did, by formal resolution, recommend approval of the subject rezoning application only with certain required conditions; and

WHEREAS, after notice as provided by law, a public hearing was held by this Board on February 2, 1999, which hearing was continued for additional testimony to March 10, April 27, May 27, June 29, and July 13, 1999; and

CC99-427 Page 2

WHEREAS, based on the study of the Comprehensive Plan, comments of the Jefferson County Planning Commission, comments of the Jefferson County Planning Department, comments of public officials and agencies, and testimony and written comments from all interested parties, this Board finds as follows:

- 1. That proper posting, publication and public notice was provided as required by law for the hearings before the Planning Commission and the Board of County. Commissioners of Jefferson County.
- 2. That the hearings before the Planning Commission and the Board of County Commissioners were extensive and complete, that all pertinent facts, matters and issues were submitted and that all interested parties were heard at those hearings.
- 3. That the proposal does not substantially conform with the Central Mountains Community Plan because it does not conform to the policy recommendations associated with visual resources, public services/facilities and mountain site design criteria.
- 4. That the proposal does not substantially conform with the Telecommunications Land Use Plan because it does not conform to the policy recommendations associated with tower siting.
- That the proposal does not meet minimum standards for telecommunications facilities contained in the Jefferson County Zoning Resolution. The proposal fails to meet these standards because it does not demonstrate that no alternative existing site is available to accommodate the equipment at a reasonable cost or other business terms, because the proposal does not contain sufficient setbacks, and because the proposal does not demonstrate that the NIER emission levels set forth in the Zoning Resolution are met.
- 6. That the proposal is incompatible with residential uses in the surrounding area.
- 7. That for the above stated reasons, the applied for rezoning is not in the best interest of the health, safety, morals, convenience, order, prosperity and welfare of the residents of Jefferson County.
- 8. That each of the factors set forth above is adequate independently to support this resolution.

CC99-427 Page 3

NOW, THEREFORE, BE IT RESOLVED that Rezoning Application Case No. 98015154RZP1 to amend Jefferson County Zoning Map No. 107 to rezone the Mountain Residential-One and Agricultural-Two Zone Districts to Planned Development Zone District for the following described unincorporated area of Jefferson County, be and hereby is DENIED.

A PARCEL OF LAND BEING A PART OF THE SOUTHWEST QUARTER OF SECTION 4 TOGETHER WITH A PART OF SUBDIVISION NO. 6 LOOKOUT MOUNTAIN PARK, LOCATED IN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 4 SOUTH, RANGE 70 WEST OF THE 6TH P.M., COUNTY OF JEFFERSON, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTH QUARTER CORNER OF SAID SECTION 4; THENCE S89°23'35"W ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 4 A DISTANCE OF 654.27 FT. (S89°33'30'W 654.13 FT.(R)) TO A CORNER OF THAT TRACT OF LAND DESCRIBED IN BOOK 231 AT PAGE 239 OF THE JEFFERSON COUNTY RECORDS: THENCE ALONG THE BOUNDARY OF SAID TRACT THE FOLLOWING THREE (3) COURSES: 1) THENCE NO3°36'52'W A DISTANCE OF 461.72 FT. (NO3°21'14"W 462.66 FT.(R)), 2) THENCE \$74°00'50°W A DISTANCE OF 233.57 FT. (\$74°29'05°W 235.55 FT.(R)), 3) THÉNCE S65°22'50°W A DISTANCE OF 174.39 FT. (S65°14'10'W 172.05 FT.(R)); THENCE N25°04'45'W A DISTANCE OF 810.21 FT. (N24°22'47°W 831.86 FT.(R)) TO THE SOUTHWESTERLY CORNER OF LOT 9, BLOCK 4, SUBDIVISION NO. 6 LOOKOUT MOUNTAIN PARK, THENCE ALONG THE SOUTHERLY BOUNDARY LINE OF SAID BLOCK 4 S48° 17'31'W A DISTANCE OF 470.54 FT. (S48° 16'00"W 469.0 FT.(R)) TO THE SOUTHWESTERLY CORNER OF LOT 16 OF SAID BLOCK 4; THENCE NOO 00 00 W A DISTANCE OF 235.71 FT.; THENCE S54 05 00 W A DISTANCE OF 64.79 FT. TO THE SOUTHWESTERLY CORNER OF LOTS 53, BLOCK 3 OF SAID SUBDIVISION NO. 6 LOOKOUT MOUNTAIN PARK; THENCE ALONG THE WESTERLY BOUNDARY LINE OF SAID LOT 53 NOO" OO W A DISTANCE OF 142.49 FT. TO THE NORTHWESTERLY CORNER OF SAID LOT 53; THENCE ALONG THE NORTHERLY BOUNDARY LINES OF LOTS 53, 55 AND 57 OF SAID BLOCK 3 N37° 16'36'E A DISTANCE OF 253.59 FT. (247.2 FT.(R)) TO THE NORTHEASTERLY CORNER OF SAID LOT 57; THENCE ALONG THE WESTERLY BOUNDARY LINES OF LOTS 59 AND 77 OF SAID BLOCK 3 NO0°00'28'W A DISTANCE OF 99.92 FT. (107.9 FT.(R)); THENCE ALONG THE NORTHWESTERLY BOUNDARY LINE OF SAID LOT 77 N43°28'25'E A DISTANCE OF 23.94 FT.; THENCE ALONG THE NORTHERLY BOUNDARY LINE OF SAID LOT 77 AND THE SOUTHERLY LINE OF LOT 68 OF SAID BLOCK 3 S89°32'08'E A DISTANCE OF 253.45 FT. (233.7 FT.(R)) TO THE SOUTHEASTERLY CORNER OF THE WEST TWENTY FT. (20') OF LOT 68 OF SAID BLOCK 3: THENCE ALONG THE EASTERLY BOUNDARY LINE OF THE WEST TWENTY FT. (20") OF LOTS 68, 69 AND 70 OF SAID BLOCK 3 NO0°03'04'E A DISTANCE OF 149.97 FT. TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF LOT 72 OF SAID BLOCK 3; THENCE ALONG THE SOUTHERLY BOUNDARY LINE OF SAID LOT 72 N89°37'55'W A DISTANCE OF 113.83 FT. TO THE MOST WESTERLY CORNER OF SAID LOT 72: THENCE ALONG THE NORTHERLY BOUNDARY LINE OF SAID LOT 72 ALONG A NON-TANGENT CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 41°59'56", A RADIUS OF -225.00 FT., WHOSE CHORD BEARS S61°45'02"W, AND AN ARC LENGTH OF 164.93 FT. TO THE NORTHEASTERLY CORNER OF SAID LOT 72; THENCE N52°39'43'W A DISTANCE OF 28.99 FT. TO THE SOUTHWESTERLY CORNER OF LOT 29 BLOCK LOF SAID SUBDIVISION

NO. 6 LOOKOUT MOUNTAIN PARK; THENCE ALONG THE WESTERLY BOUNDARY OF SAID LOT 29 NO0°04'40'W A DISTANCE OF 102.70 FT. TO THE NORTHWESTERLY CORNER OF SAID LOT 29; THENCE N16°20'56'W A DISTANCE OF 18.16 FT. TO THE SOUTHEASTERLY CORNER OF THE WEST TWENTY FT. (20') OF LOT 64 OF SAID BLOCK 1; THENCE ALONG THE EASTERLY BOUNDARY LINE OF THE WEST TWENTY FT. (20') OF SAID LOT 64 NOO°03'27"E A DISTANCE OF 84.85 FT. TO A POINT ON THE NORTHERLY BOUNDARY LINE OF SAID BLOCK 1 THENCE ALONG SAID NORTHERLY BOUNDARY LINE THE FOLLOWING TWO (2) COURSES: 1) THENCE S83°07'38'W A DISTANCE OF 171.39 FT. (S82°43'18'W 201.00 FT.(R)) 2) THENCE N86°40'34"W (N87°03'16'W (R)) A DISTANCE OF 52.79 FT. TO THE NORTHWEST CORNER OF LOT 60 OF SAID BLOCK 1; THENCE S00°13'34'W A DISTANCE OF 275.25 FT. TO THE SOUTHEASTERLY CORNER OF LOT 23 OF SAID BLOCK'1; THENCE ALONG THE SOUTHERLY BOUNDARY LINES OF LOTS 23 AND 22 OF SAID BLOCK 1 N74°06'00'W A DISTANCE OF 103.66 FT. (104.0 FT.(R)) TO THE SOUTHWESTERLY CORNER OF SAID LOT 22; THENCE NOO° 15'22'W A DISTANCE OF 79.94 FT. (81.5 FT.(R)) TO THE NORTHWESTERLY CORNER OF SAID LOT 22; THENCE N89°40'57°W A DISTANCE OF 24.53 FT. TO THE SOUTHWESTERLY CORNER OF LOT 44 OF SAID BLOCK 1; THENCE NO0°13'34"E A DISTANCE OF 174,04 FT. TO THE NORTHWESTERLY CORNER OF LOT 59 OF SAID BLOCK 1; THENCE ALONG THE NORTHERLY BOUNDARY LINE OF SAID BLOCK 1 N86°40'34°W (N87°03'16'W (R)) A DISTANCE OF 222.49 FT. TO A POINT ON THE EASTERLY BOUNDARY LINE OF THAT TRACT OF LAND DESCRIBED IN BOOK 2228 AT PAGE 9 OF THE JEFFERSON COUNTY RECORDS; THENCE ALONG SAID EASTERLY BOUNDARY LINE NO5°47'54'W A DISTANCE OF 422.74 FT. (NO5°33'15'W 396.54 FT.(R)) TO A POINT ON THE BOUNDARY LINE OF THAT TRACT OF LAND DESCRIBED IN BOOK 325 AT PAGE 300 OF THE JEFFERSON COUNTY RECORDS; THENCE ALONG SAID BOUNDARY LINE THE FOLLOWING TWO (2) COURSES: 1) N88°37'57"E A DISTANCE OF 440.23 FT. (N88°52'09"E 432.18 FT.(R)) 2) N01°21'19"W (NO0°35'54"E (R)) A DISTANCE OF 270.0 FT. TO A POINT ON THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 4; THENCE ALONG SAID NORTH LINE N88°37'58'E A DISTANCE OF 1,401.33 FT. (N88°52'09°E 1,401.21 (R)) TO THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SECTION 4; THENCE ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 4 S03°43'21"E A DISTANCE OF 2,587.08 FT. (S03°29'00'E 2,587.20 FT.(R)) TO THE POINT OF BEGINNING.

A PARCEL OF LAND BEING LOTS 47, 48, 49, 50 AND 51, BLOCK 2, SUBDIMSION NO. 6 LOOKOUT MOUNTAIN PARK, A SUBDIMSION PLAT RECORDED IN BOCK 1 AT PAGE 11A OF THE RECORDS OF THE JEFFERSON COUNTY CLERK AND RECORDER, LOCATED WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 4 SOUTH, RANGE 70 WEST OF THE SIXTH PARTICULARLY DESCRIBED AS FOLLOWS:

<sup>-</sup> COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF SAID SECTION 4. AND CONSIDERING THE WEST LINE OF SAID SOUTHWEST QUARTER OF SECTION 4 TO BEAR SOUTH 02'42'23" EAST, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO: THENCE SOUTH 37'53'45" EAST A DISTANCE OF 1208.02 FEET TO THE NORTHWEST CORNER OF SAID LOT 47, BLOCK 2, BEING THE POINT OF BEGINNING:

THENCE SOUTH 74'06'00" EAST ALONG THE NORTHERLY LINE OF SAID LOTS 47, 48 AND 49, BLOCK 2 A DISTANCE OF 113.31 FEET TO A POINT OF CURVATURE:

THENCE ALONG THE EASTERLY LINE OF SAID LOT 49, BLOCK 2 ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 111'49'00", A RADIUS OF 45.00 FEET AND AN ARC LENGTH OF 87.82 FEET:

THENCE SOUTH 37"43"00" WEST ALONG THE SOUTHEASTERLY LINE OF SAID LOTS 49, 50 AND 51, BLOCK 2 A DISTANCE OF 108.91 FEET;

THENCE SOUTH 4709'00" WEST ALONG THE SOUTHEASTERLY LINE OF SAID LOTS 50 AND 51. BLOCK 2 A DISTANCE OF 89.50 FEET TO THE SOUTHWEST CORNER OF SAID LOT 51, BLOCK 2:

THENCE NORTH 00'00'00" WEST ALONG THE WESTERLY LINE OF SAID LOTS 51 AND 47, BLOCK 2 A DISTANCE OF 248.88 FEET TO THE POINT OF BEGINNING:

CONTAINING 0.50 ACRES, MORE OR LESS.

A PARCEL OF LAND BEING LOT 35. THE EASTERLY HALF OF LOT 36, ALL CF LOTS 37 TO 42, BLOCK 2, SUBDIVISION NO. 6 LOOKOUT MOUNTAIN PARK, A SUBDIVISION PLAT RECORDED IN BOOK 1 AT PAGE 11A OF THE RECORDS OF THE JEFFERSON COUNTY CLERK AND RECORDER, LOCATED WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 4 SOUTH, RANGE 70 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF JEFFERSON, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF SAID SECTION 4, AND CONSIDERING THE WEST LINE CF SAID SOUTHWEST QUARTER OF SECTION 4 TO BEAR SOUTH 02°42'23" EAST, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO; THENCE SOUTH 21°44'46" EAST A DISTANCE OF 1060.88 FEET TO THE NORTHWEST CORNER OF SAID LOT 35, BLOCK 2, BEING THE POINT OF BEGINNING;

THENCE NORTH 89'54'00" EAST ALONG THE NORTHERLY LINE OF SAID LOT 35, BLOCK 2 A DISTANCE OF 45.12 FEET:

THENCE SOUTH 73"26"00" EAST ALONG THE NORTHERLY LINE OF SAID LOTS 35, 37, 39 AND 41, BLOCK 2 A DISTANCE OF 135.06 FEET TO A POINT OF CURVATURE:

THENCE ALONG THE NORTHERLY LINE OF SAID LOTS 41 AND 42, BLOCK 2, ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 21.08'00", A RADIUS OF 200.00 FEET AND AN ARC LENGTH OF 73.77 FEET;

THENCE SOUTH 5278'00" EAST ALONG SAID NORTHERLY LINE OF LOT 42. BLOCK 2 A DISTANCE OF 15.75 FEET TO A POINT OF CURVATURE;

THENCE ALONG THE EASTERLY LINE OF LOT 42, BLOCK 2, ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 108'54'00", A RADIUS OF 25.00 FEET AND AN ARC LENGTH OF 47.52 FEET;

THENCE SOUTH 56'36'00" WEST ALONG THE SOUTHERLY LINE OF SAID LOTS 42, 40 AND 38, BLOCK 2 A DISTANCE OF 175.19 FEET:

THENCE SOUTH 50"24"00" WEST ALONG THE SOUTHERLY LINE OF SAID LOTS 38 AND 36, BLOCK 2 A DISTANCE OF 33.95 FEET:

THENCE NORTH 000000 WEST A DISTANCE OF 96.81 FEET TO A POINT ON THE

NORTHERLY LINE OF SAID LOT 36, BLOCK 2:
THENCE SOUTH 7771'53" WEST ALONG SAID NORTHERLY LINE OF LOT 36, BLOCK 2 AND ALONG THE SOUTHERLY LINE OF SAID LOT 35, BLOCK 2 A DISTANCE OF 76.91 FEET TO THE SOUTHWEST CORNER OF SAID LOT 35, BLOCK 2:

THENCE NORTH 0000'00" WEST ALONG THE WESTERLY LINE OF SAID LOT 35, BLOCK 2 A DISTANCE OF 155.61 FEET TO THE POINT OF BEGINNING:

CONTAINING 0.83 ACRES, MORE OR LESS.

CC99-427 Page 6

Commissioner Holloway seconded the adoption of the foregoing Resolution. The roll having been called, the vote was as follows:

Commissioner Michelle Lawrence Commissioner Richard M. Sheehan Commissioner Patricia B. Holloway, Chairman

Aye Absent Aye

The Resolution was adopted by majority vote of the Board of County Commissioners of the County of Jefferson, State of Colorado.

Dated: August 3, 1999

# Appendix P

Jefferson County Telecommunications Land Use Plan



# Jefferson County Telecommunications Land Use Plan

- Acknowledgments
- Telecommunications Land use Plan

Introduction **Executive Summary** Telecommunications Technology & Regulatory Framework

Findings & Policies

Demand for New Facilities **Engineering & Economic Concerns** Visual & Noise Impacts Residential Interference Health Issues Property Values Tower Siting & Review Procedure

14 Addendum: Low Power Mobile Radio Service

Introduction

Background

Low Power Mobile Radio Service Technology Low Power Private Mobile Radio Service Technology Types of Facilities Health Issues

Community Response Federal, State & Local Regulations **Future Demand** 

Site Selection

**Abandonment** 

**Industry Site Selection Criteria** Citizens' Site Selection Criteria General Policies for Site Selection Site Selection Policies

Zone District Use Standards Chart Visual Impact & Screening Policies

Implementation Policies **Zoning Resolution Changes Community Notification** Third Party Review

21 Glossary

#### Produced by

# the Jefferson County Planning & Zoning Department

100 Jefferson County Parkway, Suite 3550, Golden, Colorado 80419-3550 While Bear Crock des, proposal active

http://co.jefferson.co.us/dpt/planning/planning.html

Richard Turner, Director

Republished October 1997 | 985-1993 Con Vinel

with arbitrary omissions

To achieve a more concise format for publishing, this document has been reorganized from the original order in which it was adopted.

# **Acknowledgments**

# 1985 Jefferson County Telecommunications Land Use Plan **Jefferson County Planning Commission**

Polly Hearn

Andree Krause

David Peterson

Mike M'Gillycuddy

Gene Sternberg

Sherry Weinstein

Darrel Havener lim Allred

Jim Gorman

# **Jefferson County Board of County Commissioners**

Rich Ferdinandsen

Marjorie E. Clement

Don Stanbro

# **Advisory Panel on Telecommunications Towers**

Andrew Brock - Arvada resident representing the interest of "Plains" citizens

Chris O'Dell - Lookout Mountain resident

Katherine Lamb - Lookout Mountain resident

Eric Stenberg - Vice President/General Manager, KPKE Radio

Colin Bradley - RF Systems Supervisor, KMGH-TV

Karl Ramstetter - Chief, Golden Gate Fire Department

James Butts - Owner, Aspen Grove Communications, Inc.

Paul Montoya - Director of Engineering, KBPI Radio

Don Lindsly - General Manager, New Vector Communications

Don Ranniger - President, Telecommunications Products, Inc.

# 1993 Amendment to the Jefferson County Telecommunications Land Use Plan Policies

# **Jefferson County Planning Commission**

Donald Eikner

Jan Rousselot

Michael Cole

Dave Krapes

Susan Williams

Rick Nelson

Norman Hodge

Karen Nicol

Sherry Weinstein

# **Jefferson County Board of County Commissioners**

Marjorie E. Clement

Rich Ferdinandsen

John P. Stone

#### **Policy Revision Advisory Group**

Karen Bull - C.A.R.E.

Chris O'Dell - Citizen

Judith Pearl - Genesee Foundation

Kathryn Isenberger - Bear Creek Development Corporation

Gil McNeish - Calkins Kramer Grimshaw & Harring

Mary McKinley - Coors Brewing Company

Myron Olinar - KUSA-TV Channel 9

Brym St. Clair - KBDI-TV Channel 12

John Baich - KCNC-TV Channel 4

Ray Milius - KMGH-TV Channel 7

Don Johnson - KRMA-TV Channel 6

Ken Gratteau - KWGN-TV Channel 2

Steve Coulam - KDVR-TV Channel 31

Dirk Freeman - TTC

**Bob Bonner - STI Mobile Communications** 

Dick Merkle - STI Mobile Communications

Robert McKenze - CenCall Incorporated

Howard Ritter - CenCall Incorporated

Craig Roberts - KHOW Radio

Rick Thompson - Public Service Company

Dave Sage - Motorola Communications

Jeff Levy - AutoPhone

Tom Ragonetti - OJRNR

Larry Storms - SCI/US West Paging

William Schueller - Eldorado Communications

Rodney Wright - Adams County Communications Center

Charles Frank Gross - NewsWeb Corporation

## 1994 Low Power Mobile Radio Service Telecommunications Land Use Plan Addendum

## **Jefferson County Planning Commission**

Karen Nicol

.

Sherry Weinstein

Laura Ditges

Felicity Hannay

Eric Maule

Ian Rousselot

Wallace Pulliam

Paul Rosasco Donald Eikner

## Jefferson County Board of County Commissioners

Gary D. Laura

Betty J. Miller

John P. Stone

## Low Power Mobile Radio Service Addendum Advisory Group

Judith Pearl - Homeowners Representative, Genesee Foundation

Dan Lincoln - Homeowners Representative, ENABLE

Roger Botterbusch - Homeowners Representative, COHOPE

Rick Sullivan - Cellular One

Ann Closser - Closser Consulting

Fred Fox - Foxfire Community Planning

Anne Willhardt - Citizen

Gerald Dahl - Attorney at Law, Gorsuch Kirgis, Et. Al.

Leslie Armstrong - Citizen

Jane Alcorn - US West NewVector Group

Alex Iskenderian - Citizen

Larry Storms - SASI

# **Telecommunications**

# Introduction

#### What it is:

This document is three separately adopted portions combined to make one user-friendly document. The Telecommunications Land Use Plan consists of a set of findings and policies (original plan adopted May 8, 1985, revised policies adopted January 20, 1993) to be used as a guide for making land use decisions on the siting and design of telecommunication facilities. This document includes County policy regarding broadcasting, satellite and two-way communication facilities. The Low Power Mobile Radio Services Addendum (adopted October 19, 1994) includes policies specific to that type of use.

#### Who did it?

In May 1984, the County Commissioners appointed an advisory panel composed of representatives of industry, public agencies and citizen interests. The advisory panel developed recommendations for the policies contained in this Plan. Advisory groups also updated the policies in 1993 and developed the Low Power Mobile Radio Services Addendum in 1994. All plans were adopted by the Jefferson County Planning Commission.

## To understand the report better:

To adequately address the complicated issues involved in the field of telecommunications, it was necessary to use some technical terms and symbols. There is a glossary at the back of the Plan to assist the lay reader.

# **Executive Summary (1985)**

The Telecommunications Land Use Plan is the component of Jefferson County's comprehensive plan which provides guidelines for land use decisions related to telecommunication facilities. The Plan was adopted by the County Planning Commission after receiving recommendations from an advisory panel which met for over 10 months.

Jefferson County faces a considerable demand for telecommunication facility is due to the growth of this industry, the presence of mountainous terrain in close proximity to market areas, and changes to Federal Communication C (FCC) regulations. In the forseeable future, Jefferson County will see a demand for four to five new UHF television stations, the relocation of seven to eight FM radio stations and one new FM station, nine low-power television stations 100 to 150 two-way transmitters, 11 to 12 cellular radio

sites for mobile telephone, and a considerable number of commercial satellite and microwave relay sites. While many of the smaller facilities such as microwave and two-way can be located on existing towers or other tall structures, there are very few broadcasting towers capable of physically handling additional antennas. The owners of those towers with some additional physical capacity are reluctant to share with others due to the threat of competition, interference, or perceived management problems.

Telecommunication facilities can cause many impacts on the surrounding community if they are not properly sited and designed. This is especially true of high-powered broadcasting facilities. To avoid and minimize these impacts, the Plan contains policies regarding visual and noise impacts, residential interference, health issues, property values, and recommended locations.

# Telecommunications Technology & Regulatory Framework (1985)

# Major Types of Facilities

- 1. Broadcasting Used to transmit AM & FM radio signals and VHF or UHF television. With the exception of AM, these towers are generally located on high ground as the technology requires "lineof-sight" between the transmitter and receivers. AM radio does not require line-of-sight as its signals travel along the ground. Since Jefferson County has a lot of mountainous terrain in close proximity to the metropolitan area, it is quite attractive for FM and television towers. These towers are generally constructed of steel lattice or tubular steel and can be self-supporting or guyed. Guyed towers occupy more land area as guy wires must extend from the base a distance of two-thirds of the tower height. Self-supporting towers are bulkier than guyed towers. Antenna weight ranges from 3,000 to 10,000 pounds.
- 2. Two-way radio (also called land-mobile radio) This is the most common type of communication system operated by government agencies and private business. Mobile units communicate with a fixed base station. As two-way antenna are lightweight, a single tower can hold several. They can also be placed on tall structures such as buildings or water towers. Like broadcasting facilities, "lineof-sight" is needed between the transmitting and receiving units. Towers can be guyed or self supporting.
- 3. Fixed Point Microwave Microwave relay is used to transmit sound and visual images between two or more fixed points. "Lineof-sight"is needed between microwave dishes. They can often be located on other towers or buildings.

- 4. Commercial Satellite Satellite signals are received by large dishes. While elevated sites are not needed, line of sight is required between the ground station and transmitting satellite. The large satellite dishes south of Morrison are a good example of this technology.
- 5. Cellular Radio A relatively new technology used for mobile telephone systems. Low powered transmitters are used to transmit signals in a small area or "cell". Antennas must be 150-175' high and can be located on towers or buildings. As the transmission range is small, several towers are needed to cover a large area. Jefferson County currently has three cellular radio sites operated by New Vector Communications, and others are planned by their competitor, MCI. Only two "carriers" are allowed in a metropolitan market.

## Federal Regulation of Telecommunications (1985)

Radio and television towers are currently regulated by the Federal Communications Commission (FCC), the Federal Aviation Administration (FAA), and the Occupational Safety and Health Administration (OSHA).

The FCC issues licenses for new telecommunication facilities, determining need, coordinating frequencies, and requires that towers be located at the most central point at the highest elevation available (47 CFR 73.685 (b)). Interference problems also come under the FCC's jurisdiction.

Recently the FCC passed a regulation called "Docket 80-90" which requires all FM stations to have an antenna height of 984 feet above average terrain. The application of this regulation locally will mean that every FM station but one will have to increase the height of their antenna. The deadline for compliance in March 1, 1987, which is why many FM stations are now proposing or looking for higher facilities. Failure to do so means that current licenses held would be downgraded, thereby lowering the market value of these stations.

The FAA regulates tower height, coloring and lighting to ensure aircraft safety.

OSHA regulates the occupational exposure to nonionizing electromagnetic radiation emitted from radio, microwave, television and radar facilities.

# Current County Regulations (1985)

Jefferson County regulates telecommunication facilities through its zoning regulations. There is no zone district which permits towers as a use-by-right. Towers are allowed in a Planned Development Zone District (PD) or as a Special Use under the agricultural zone districts, meaning that public hearings must be held and the County Commissioners must approve the request. This process is identical to that used to rezone property. If someone wants to build a tower outside an agricultural district, the property must be

Most of the towers now located on Lookout Mountain are located in Mountain Residential-One (MR-1) zoned areas. These towers were built before County zoning regulations specifically prohibited them in these areas. Consequently, they are considered "grandfathered" and allowed to continue operation. However, if a significant change is proposed to one of these towers, rezoning is required which allows for public hearings.

# Findings (1985) & Policies (1993) **Demand For New Facilities**

#### Findings:

1. The new facilities which will be needed in the foreseeable future

#### a. Broadcasting

Two new UHF television stations, one allocated to Boulder and one to Denver, have construction permits; there may by two or three more issued in the forseeable future.

- One new FM radio station allocated to Evergreen, but no construction permit granted.
- 7-8 FM radio stations may relocate due to FCC rule 80-90.
- Nine low power TV (1 RW ea.).

Jefferson County is where the transmitter facilities of Denver's major broadcasters are located. Considerable demand for additional broadcasting facilities is expected in the future.

#### b. Two-way

 300-350 fixed transmitters in next 10 years for metro area, 100-150 could locate in Jeffco (assuming 70 units (phones) per transmitter, this would provide service to 21,000 - 24,500 units).

#### c. Cellular radio

 33-35 new tower sites in metro area could be needed -1/3 could be in Jeffco.

#### d. Microwave relay

- While it is impossible to predict the number of relay sites or dishes needed, the number is expected to increase substantially. Variables which could affect demand are: the tendency of industry to go to microwave when lease line charges by phone company are high enough, fiber optic technology which may replace microwave in certain cases, and radio frequency standards established by the federal government which could make it more difficult to build new towers.
- 2. The demand which could be physically accommodated on existing towers or other structures is:

#### a. Broadcasting

- TV channels 7,9 have towers which could technically handle more FM and two-way facilities. However, they are not approved for multiple use.
- FM towers probably could not handle additional antennas (nor does there seem to be a desire of FM stations to co-locate on existing FM towers as none of them meet FCC Docket 80-90). In addition, no FM towers are approved for multiple use.

#### b. Two-way

- There are ten existing towers capable of adding 300 additional transmitters. Based on 70 units per transmitter, 21,000 units could be handled on existing towers.
- There may be a need for some new two-way sites close to populated areas to accommodate higher frequencies being given on new licenses. The reason for this need is that facilities utilizing higher frequencies have a shorter transmission range.
- It is likely that the lease space on existing two-way towers is 50% higher than that which was reported (another 10,000-10,500 units).
- Much of this demand could be met through using buildings instead of tower structures.
- c. Cellular radio
- 10-15% of needs can be accommodated on existing towers or other structures. (150-175' needed)
- d. Microwave
- Microwave users usually lease space on other towers, except for common carriers such as Mountain Bell.
- 3. There are tower owners which have facilities they are willing to lease as follows:
- a. Broadcasting
- TV channel 7, possibly.
- TV channel 9's local management doesn't have an interest.
- b. Two-way
- Owners of at least 10 existing towers have space they are willing to lease.
- c. Cellular Radio
- New Vector Communications and MCI (the other cellular radio company which will soon begin construction) do not lease tower space to each other currently but this may change.
- d. Microwave
- There may be microwave tower owners willing to lease, but they're unknown.
- 4. The rates charged by tower owners for leased space are:
- a. Broadcasting
- Lease rates cover a wide range up to \$2000-6000/month.
- b. Two-way
- \$100-300/ rack (case full of equipment).
- c. Cellular Radio
- No figures are available as New Vector Communications doesn't currently rent space to others.
- d. Microwave
- \$100-300/ rack (case full of equipment).
- 5. The reasons used by tower owners who are unwilling to lease space are:
- a. Tower lacks physical strength.
- b. Competition

- c. Security
- d. Complicates management and maintenance
- e. Equipment building may lack space.
- f. Fear of interference
- g. Technical incompatibility
- h. Fear of increased liabilities.
- 6. Existing TV broadcasters are reluctant to upgrade their facilities or consolidate on new tower because:
- a. Existing TV broadcasting facilities (except for Channel 31) do not have to protect the Boulder quiet zone as they were built before this was a requirement.
- b. They are reluctant to upgrading their facilities or locate on new towers as they would have to protect the quiet zone which reduces market coverage.
- 7. The industry trends or other variables that will reduce or increase the need for facilities are:
- a. Deregulation of the communication industry is leading to more users, market entries, and new services (e.g., cellular radio).
- b. Regulations such as FCC Docket 80-90 will lead to a demand for new towers or relocation to higher existing towers.
- c. New technologies.
- d. Facilities are being shared more.
- e. Population growth.
- f. Rental rates are increasing for shared tower space.
- g. General economic conditions.
- h. Placement of antennas on buildings in downtown Denver doesn't appear practical as the taller buildings are at FAA heights limits and utilizing shorter buildings present concerns with shadowing of signals and possible health effects.

# Engineering & Economic Concerns Findings:

- 1. Concerning television, most viewers' antennas are oriented toward Lookout Mountain which leads to television broadcasters wanting to locate new transmitting facilities in this area. Consumers also have an interest in convenient antenna orientation.
- 2. Most FM stations want to comply with FCC Docket 80-90 as failure to do so means that the current licenses held would be downgraded, thereby lowering the market value of these stations.
- 3. It is difficult to place broadcasting facilities in the Boulder area, as the FCC requires that Boulder's "quiet zone" (due to the sophisticated instruments used at the National Bureau of Standards facility) be protected.
- 4. High mountaintop sites are needed for TV and FM broadcasting facilities. Line-of-sight is needed for the desired audience.
- 5. Two-way facilities are not generally compatible with high power broadcasting facilities; however, co-location is possible under certain circumstances.

- 6. The FCC has determined that there is a legitimate need for cellular radio in the metropolitan area.
- 7. The presence of high mountain top sites in Jefferson County and its proximity to most market areas in the metropolitan area make it quite desirable for broadcasters and two-way communication providers.
- 8. Under select circumstances, shared use of antennas is possible.

- 1. Broadcasting sites should be capable of serving most of the metropolitan area.
- 2. The two-way and cellular radio sectors need to find sites capable of serving their desired markets.
- 3. Telecommunication sites should recognize consumer needs.
- 4. Telecommunication facilities should be located, designed and operated in a manner that will comply with all FCC permits and conditions to prevent objectionable levels of interference.
- 5. Telecommunication facility location and design must meet the requirements imposed by the FAA and FCC.

## Visual & Noise Impacts

#### Findings:

- 1. The key concerns related to visual impact are:
- a. Unsightly proliferation of towers affects scenic values, economic values and the sense of privacy.
- b. Some communication sites are poorly maintained and the appearance of equipment buildings is often incompatible with adjoining residential areas.
- 2. The FAA requirements regarding the coloring and lighting of
- a. Any tower over 200' tall must be painted aviation orange and white and lit with sidelights and top beacons unless the FAA grants
- b. The FAA will allow towers over 200' tall to be painted other than orange and white if day and night strobe lights are installed.
- c. If a tower is near an airport, or in the airport's flight path, lighting and coloring requirements may apply for towers less than 200'. Generally, these requirements apply if a tower is within 20,000 feet of a major airport or within 10,000 feet of a general aviation airport (like the Jeffco Airport).
- d. The FAA has the discretion to grant waivers under specified conditions; for example, if a tower is proposed near a taller existing structure, painting and lighting requirements might be waived.
- 3. The factors that must be considered in looking at visual impact
- a. Relationship of tower location to visual corridors for homes, cars, pedestrians and bikes.
- b. Type of terrain and near and far visual impacts.
- c. Presence of trees which help shield or block view angles for those around towers.

- d. Use of colors and materials which are compatible with surround-
- e. FAA requirements for coloring and lighting.

#### Policies:

- 1. Telecommunication facilities should result in a minimal visual impact for those residents in the immediate area and for those in the larger community who view these facilities from a distance.
- a. Examples of minimal visual impact would be:
- 1) A facility sited so that at least 80% of the height of the tower(s) and accompanying structure(s) is screened from view from off of the subject property by vegetation or landform.
- 2) A uni-directional facility which is surrounded by vegetation or landform that screens the tower(s) from view on the non-broadcast side and screens accompanying structure(s).
- 3) A facility where all broadcast equipment is contained within a building, the size, character and location of which is permitted by the underlying zone district.
- 4) A facility that is located down-slope from the top of a ridge line so that from key public viewpoints, a minority of the height of the tower is viewed against the sky.
- b. For facilities located in highly developed portions of the County, buildings may be used to accomplish the screening noted above.
- c. It is acknowledged that large, multi-use towers located within major use transmission areas cannot be effectively screened. In order to minimize the visual impact, such new facilities should be located in close proximity to other comparable structures. Accompanying buildings, ground-mounted antennas, and other equipment and structures should be subject to screening recommenda-
- 2. The visual impact of telecommunication facilities should be compatible with the aesthetic character of the surrounding area.
- 3. FAA requirements for coloring and lighting of towers must be considered in looking at visual impact.
- 4. The specific communication facility design issues that should be examined in looking at visual impact are: coloring, lighting, relationship to view corridors, topography, materials and architecture. Towers and antennas should be neutral in color to blend with the visual backdrop, unless specifically required by the FAA to be painted otherwise.
- 5. The visual impact of existing communication facility sites should be reduced where possible.
- 6. To minimize the visual impact of new telecommunication towers, these measures should be implemented where possible:
- a. Avoid tower heights and locations which necessitate FAA coloring and lighting. Towers of any height should not be lighted unless specifically required by the FAA. If FAA lighting is required, strobe lights should be avoided unless specifically required by the FAA.
- b. Tower and antenna consolidation.
- c. Locating away from key public viewpoints.

- d. Utilize monopoles or guyed towers rather than bulky selfsupporting lattice towers whenever possible.
- e. Placement of two-way and microwave antenna inside accessory buildings when technically possible.
- f. Locating towers near similar uses or near industrial areas.
- g. Planning antenna on existing structures of sufficient height (i.e., water tower, buildings, etc.).
- h. Any new road to a telecommunication site should be acceptable to County Engineering and the local fire department and its visual impact should be minimized by reseeding excavated areas, avoiding cuts and fills when possible, and other feasible measures.
- i. Where possible, waivers to FAA coloring and lighting requirements should be sought.
- i. Careful placement of power lines.
- k. Noise impacts could be minimized through careful location and
- l. Placement of two-way towers within forested areas with antennas just above treeline.
- 7. To minimize the visual impact of microwave dishes and commercial satellite operations, these measures should be used if technically feasible:
- a. Microwave dishes
- Place inside structures.
- Use non-reflective colors galvanized or gray.
- Use open grid dishes instead of solid ones.
- b. Commercial satellite operations:
- Use colors compatible with the surrounding environment.
- · Incorporate landscaping.
- Place in depressed areas shielded from view.
- 8. To minimize the visual and noise impacts of new equipment buildings and accessory uses (fuel tanks, fences, etc.), these measures should be utilized:
- a. Equipment buildings should blend in with the surrounding area by considering coloring, texture of materials, topography and scale of buildings.
- b. Fuel tanks can be buried or screened with landscaping, fencing or berms.
- c. Trash areas can be screened.
- d. The noise impacts of cooling and other types of equipment could be minimized through proper location and screening.
- e. Noise should not exceed state noise standards.
- 9. To minimize the visual and noise impacts of existing communication sites, these measures should be implemented:
- a. Within a specified time period, all existing sites used <u>primarily</u> for communication (not those where communication is accessory to a business like a towing business with two way communication equipment) should minimize visual and noise impacts by using the following measures:

- 1) Making equipment buildings compatible with the surrounding area by considering coloring, texture of materials, landscaping and screening. This should be done within a three year time period.
- 2) Burying and screening of fuel tanks. This should be completed within one year.
- 3) Unused or abandoned equipment must be removed, stored inside, or screened. This should be completed within one year.
- 4) The noise impacts of cooling or other types of equipment (like that used for UHF TV) could be minimized through proper screening. This should be completed within one year.
- 5) Noise should not exceed state noise standards.
- b. Measures other than regulation such as tax incentives should be considered to encourage the clean up of existing sites.
- c. Abandoned towers should be removed. County legal staff should explore ways of doing this.

## Residentiai Interference

#### Findings:

- 1. The key concern related to residential interference is: Residences near areas with high RF levels often experience interference to their electronic appliances which is inconvenient and may result in the need of equipment modifications.
- 2. The representative interference problems experienced by some of the residents of Lookout Mountain are:
- a. VCR operation results in fuzzy pictures.
- b. Garage door openers are erratic often times, the operator must be right in front of the door to make it work; sometimes, garage door won't open.
- c. Cordless phones shut off or have extreme levels of static.
- d. Regular phones pick up FM stations.
- f. KOSI is picked up on the low-band emergency radios. This problem is also experienced by low-band users outside the Lookout Mountain area.
- g. Radio stations such as KYGO, KPKE, and KOSI are received on stereo turntables.
- h. Tape recorders won't work just get a buzz.
- i. TV stations often received on different dial settings.
- j. Computers fuzzy images received on terminals.
- 3. The factors which influence interference problems more than others are:
- a. Close in residences receive more interference unless screened by topography.
- b. Interference problems seem to increase when there is snow on the ground.
- c. Increased interference occurs during the morning hours.
- d. Being on the same horizontal plane as tower antennas increases interference problems.
- 4. The probable causes of these problems are:

- a. KOSI and KYGO are major sources of interference due to the lower height of their antennas; in fact, any low to the ground antenna is likely to cause interference.
- b. General interference is to be expected with the high levels of RF in the area (a one-quarter to one-half mile radius from where towers are located primarily).
- c. If homes are on roughly the same horizontal plane as antennas, interference can extend a significant distance beyond a one-quarter to one-half mile radius.
- d. High tension power lines in the area are a contributing factor as they pick up broadcast transmissions and re-radiate them.
- e. Many electronic appliances are built without good shielding and filters due to the industry's desire to keep them affordable.
- f. Some interference problems are frequency related and beyond the County's authority such as FM stations being received on low band emergency radios.
- 5. What factors, other than high RF levels, cause disruption to residential electronic appliances?
- a. Momentary power interruptions can cause computer disruption.
- b. Erratic operation of electronic garage doors is often caused by radios used in aircraft flying over the area.

#### **Policies:**

- 1. New telecommunication facilities will minimize interference for nearby residents.
- 2. The responsibility for resolving interference problems should be shared by all parties involved.
- 3. The practical solutions to the current residential interference problems on Lookout. Mountain that should be implemented are:
- a. The broadcast industry should be encouraged to establish an education program for residents to provide information on techniques which residents could use to reduce interference problems. For example, the following information would be helpful for many interference problems:
- Use direct audio and video inputs for TV's and VCR's.
- Use "keyed" electronic garage door openers instead of transmitter operated ones.
- Electronic appliances may have to be placed in special locations in the home.
- Use metal shielding boxes on appliances to reduce interference.
- Many manufacturers of electronic appliances will send filters, free of charge, for use in their equipment to reduce interference.
- How contacting the local "technical committee" may give you ideas of how to reduce interference.
- FCC has a pamphlet available which gives ideas on how to reduce interference.
- b. The broadcasting industry should establish a "technical committee" to address interference problems on Lookout Mountain. This committee would provide technical assistance to homeowners on causes of and solutions to interference problems.

c. If existing facilities are "upgraded", they should be reviewed according to the criteria and regulations for new facilities.

Upgraded facilities are those involving the addition of a broadcast station, change in tower height, addition of a new tower, change in primary site use, or broadcaster wanting to use a site or facilities that have been used by another broadcaster. A change in the licensed ownership of a station should be exempted from the definition of "upgraded" facilities.

- 4. The practical solutions that should be used by the County to avoid interference problems when new towers are sited:
- a. Encourage the establishment of cooperative multiple use sites. One incentive which could be used to accomplish this is the use of public lands for cooperative tower sites or using public funds to buy land for tower sites or the buffer surrounding tower sites.
- b. The factors which should be considered in minimizing the interference from new towers are:
- Setbacks.
- Height of tower towers should be elevated above populated
- Antenna design (modifications to the antenna to minimize signal strength in a given direction).
- Adjusting transmitter power levels.
- Topography, i.e., locating tower on mountain top above residential areas.
- c. The County should retain a paid private consultant to provide information on the technical considerations (i.e., interference) in siting new towers. The funds needed to pay this consultant could be raised by increasing the application fee for tower requests.
- d. Rezoning of land near established broadcasting sites for more intensive residential uses should be discouraged.
- e. Rezoning of residentially zoned land for towers should be discouraged.

#### Health Issues

#### Findings:

- 1. The key concern regarding the health effects of exposure to RF emitted from communication antennas is:
- Short-term exposure to high levels of RF or long term exposure to low levels of RF could be hazardous to human health.
- 2. These facts are known about the actual health hazards posed by exposure to RF:
- · While the scientific community agrees that RF exposure presents health concerns, there is disagreement on the level at which RF exposure becomes an actual health hazard.
- Thermal effects occur when exposure levels exceed 5,000 to 10,000 uW/cm<sup>2</sup> in the resonant frequencies (30-300 MHZ which is where FM and VHF TV fall).
- A study prepared by the Environmental Protection Agency (EPA) titled Biological Effects of Radio Frequency Radiation indicates that there are physiological effects (i.e., secretion of some hor-

mones, decreased weight of some hormone producing glands and changes in white blood counts, brain waves, and the lens of the eye) at much lower levels. Whether or not these health effects are adverse to human health is unknown.

It should be noted that the principal health concerns come from high power broadcasting facilities (i.e., FM, UHF TV, VHF TV). The possible health effects of microwave seem minimal as power levels are low and antennas used are highly directional. Two-way and cellular radio also use low power levels and should not present health concerns.

- 3. The current health standards for RF exposure are:
- The FCC has adopted the ANSI standards for non-occupational exposure.
- OSHA enforces a standard of 10,000 uW/cm² for occupational exposure based on the level at which thermal effects occur.
- ANSI has adopted a voluntary standard for non-occupational exposure of 1,000 uW/cm<sup>2</sup>. This standard was calculated by taking the 10,000 uW/cm<sup>2</sup> at which damaging thermal effects occur and using a seemingly arbitrary factor of 10 (10,000 uW/cm² divided by  $10 = 1,000 \text{ uW/cm}^2$ ).
- Multnomah County, Oregon, and the State of Massachusetts have adopted a standard which is 1/5 of ANSI's or 200 uW/cm<sup>2</sup>. The Portland Planning Commission is using an interim guideline of 100 uW/cm<sup>2</sup>. New York City recently considered, but did not adopt, a standard 1/20 of ANSI's or 50 uW/cm<sup>2</sup>. The Canadian government is proposing a RF exposure standard of 1000 uW/cm² for the general public. All of these standards are for frequencies in the 30-300 MHZ range.
- 4. Regarding the current levels of RF on Lookout Mountain:
- EPA has conducted preliminary studies to determine both the "average" exposure and "hot spots".
- Average exposure is 20 uW/cm² based on random measurements along Cedar Lake Road. The EPA conducted this study using a Holaday Industries Broadband Meter. At each location, three measurements were taken and averaged. The average values at each location were then averaged. It should be noted that these measurements were restricted to the road; no private property was tested. The 20 uW/cm<sup>2</sup> average does not consider areas outside of the Cedar Lake Road circle.

An earlier study shows that there are "hot spots" such as in front of KOSI's transmitter building where the reading was 530 uW/cm<sup>2</sup>. The highest level found near a home was 133 uW/cm<sup>2</sup>.

- 5. Current RF levels on Lookout Mountain do not exceed the existing federal standards. There are "hot spots" exceeding the standard utilized by other jurisdictions.
- 6. The factors which determine the level of RF exposure are:
- a. Proximity to antenna (both horizontally and vertically).
- b. Length and intensity of exposure.
- c. Power level of transmitter.
- d. Pattern of antenna.

- e. Humidity/heat higher humidity and heat affect the body ability to dissipate heat.
- It is impossible to make RF projections for the expected ne facilities on other than a case specific basis.

According to EPA, new transmitters could be safely placed o Lookout Mountain if placement is judicious and engineered to tal into account the factors described in #6.

7. Is there currently a probable health risk to residents of Lookot Mountain or elsewhere in the County due to RF from towers?

No actual health <u>risks</u> due to RF exposure to Lookout Mountai residents have been documented, although there could be son. health effects. It is not known if these effects are adverse to huma health.

#### Policies:

- 1. Telecommunication facilities should be located and designed t prevent exposure to RF in excess of current, projected, or suggeste standards. At the time of rezoning application, the applicar. should show that when the proposed facility is fully operationa the NIER level measured at the property line will not exceed th standard established by ANSI C95.1 or the most current applicabl standard.
- 2. The practical measures that could be used to reduce RF exposur for residents living near existing tower sites or that would minimiz RF exposure in future siting of towers are:
- a. Encourage stations to lease space on tall, existing towers.
- b. Require an adequate buffer separating towers from residentia and commercial uses, based on RF standards.
- c. The County should adopt the ANSI standards for RF exposure (i.e., 1000 uW/cm² for 30-300 MHZ). The County should review adopted standards on a regular basis and change its regulations when necessary to reflect new evidence of health effects, improved measurement of RF levels, or standards promulgated by the State of Colorado, the Federal Government, or national industry groups like ANSI. Health standards should only apply to transmitters with a power output above 2,000 watts. Power output below this level does not present a health concern.
- d. The ANSI standards should apply to new or upgraded facilities. Applicants should provide calculations to show what the cumulative RF levels would be at various locations. These calculations should be reviewed by the County's consultant.
- e. Expected RF levels should be calculated for the nearest habitable structure near the proposed tower, adjacent residentially zoned property, locations with the highest theoretical RF level, and other locations deemed necessary by the County after consideration of topography and antenna pattern.
- f. Actual RF levels should be measured at the locations described above, after start-up of facility. If RF levels exceed the adopted standard, transmitter power level should be reduced to a level which will meet RF standards until operations are modified. Failure to do so will be considered a zoning violation.